

WHAT IS CLAIMED IS:

1. A printer comprising:
a frame;
a set of non-movable print heads fixed to the frame;
an idler carriage for carrying a web, said idler carriage disposed a distance from the set of print heads so that ink from the print heads will be received by the web; and
a carriage translation assembly to move the idler carriage to vary the distance between the set of print heads and the idler carriage.
2. The printer as defined in claim 1, wherein the set of print heads comprise inkjet print heads.
3. The printer as defined in claim 1, wherein the carriage translation assembly comprises at least one slide shaft;
wherein the idler carriage is disposed to slide linearly along the slide shaft; and
a force mechanism is provided for exerting a force to move the idler carriage linearly along the slide shaft.
4. The printer as defined in claim 3, wherein the slide shaft moves within a bearing set in the idler carriage.
5. The printer as defined in claim 1, further comprising an accumulator structure for taking up slack in the web as the idler carriage moves.

6. The accumulator structure as defined in claim 5, wherein the accumulator structure maintains constant web tension throughout the travel range of the idler carriage.

7. The printer as defined in claim 5, wherein the accumulator structure comprises a leg disposed at an end of the idler carriage and extending away from the print heads in a direction of movement of the idler carriage; and

an idler roll disposed at the end of the leg, with the web extending down along the leg, around the idler roll, and back up to the idler carriage.

8. The printer as defined in claim 5, wherein the accumulator structure comprises at least one accumulator roll; and

an accumulator roll tensioner for automatically positioning the accumulator roll in response to the movement of the idler carriage in order to maintain a tension on the web.

9. The printer as defined in claim 8, wherein the accumulator roll tensioner includes a piston actuator that is controlled by a signal indicative of the movement of the idler carriage.

10. The printer as defined in claim 8, wherein the accumulator structure includes at least three rolls, with a center roll thereof being movable by a piston actuator.

11. The printer as defined in claim 3, wherein the force mechanism is an piston actuator.

12. The printer as defined in claim 1, further comprising at least one fixed block located in the frame which sets, at least in part, the upper position of the idler carriage.

13. The printer as defined in claim 12, further comprising a clamping mechanism to provide a mechanical compressing force to the idler carriage at an upper position of the idler carriage to the fixed block.

14. The printer as defined in claim 13, wherein a position of the at least one clamping mechanism is determined by a piston actuator.

15. The printer as defined in claim 13, wherein alternate upper positions of the idler carriage may be achieved by extending a shim between the fixed block and the idler carriage.

16. The printer as defined in claim 15, wherein a plurality of shims are used to accommodate varying web thickness by providing multiple or stepped elements which may be selectively placed between the fixed block and the idler carriage to set the proper distance of the web to the printer.

17. The printer as defined in claim 15, further comprising an actuator for moving the shim, which was selected for the appropriate web thickness, into position between the fixed block and the idler carriage.

18. The printer as defined in claim 17, wherein a plurality of the shims of different thicknesses are set on a bar, and wherein the bar is disposed so that when it is moved by the actuator laterally relative to the block, a selected one of the plurality of shims is disposed between the fixed block and the idler carriage.

19. The printer as defined in claim 13, wherein the clamping hook provides a mechanical compressing force between the fixed block, the shim, and the idler carriage extension point.

20. The printer as defined in claim 1, wherein the carriage translation assembly includes at least three slides shafts disposed in parallel relative to each other.

21. The printer as defined in claim 12, wherein the fixed block is disposed at one end of the slide shaft.

22. A method for adjusting the idler carriage for a printer, comprising the steps of providing a movable idler carriage; and

moving the idler carriage to make an adjustment in spacing between a web and a fixed print head.

23. The method as defined in claim 22, wherein the moving step comprises sliding the idler carriage along a slide shaft.

24. The method as defined in claim 22, further comprising the step of maintaining a substantially constant tension on the web as the idler carriage is moved.

25. The method as defined in claim 24, wherein the maintaining a substantially constant tension step comprises running the web across an accumulator roll; and

automatically positioning the accumulator roll in response to movement of the idler carriage.

26. The method as defined in claim 22, further comprising moving at least one shim into place between a fixed block and the idler carriage in order to change the upper most position of the idler carriage.

27. The method as defined in claim 26, wherein the moving the at least one shim step comprises moving a bar with at least two different thickness shims thereon in order to change the shim between the fixed block and the idler carriage to thereby change the upper most position of the idler carriage.

28. A printer comprising:
a frame;
a set of non-movable print head means fixed to the frame;

an idler carriage means for carrying a web, said idler carriage means disposed a distance from the set of print head means so that ink from the print head means will be received by the web; and

a carriage translation means to move the idler carriage means to vary the distance between the set of print head means and the idler carriage means.

29. The printer as defined in claim 28, further comprising means for taking up slack in the web as the idler carriage means moves.

30. The printer as defined in claim 28, further comprising means for setting alternate upper positions of the idler carriage means.